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<tr>
<th>Time</th>
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<tr>
<td>9:30 – 3:00</td>
<td><strong>Full day Workshop on PSoC (Cypress University Alliance)</strong></td>
<td>Rangimarie 2, Level 3, Te Papa</td>
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<tr>
<td>9:00 – 4:30</td>
<td><strong>AAEE Executive Committee Meeting</strong></td>
<td>Rangimarie 3, Level 3, Te Papa</td>
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<tr>
<td>6:30 - 7:30</td>
<td>Welcome Reception</td>
<td>Signs of a Nation, Level 4, Te Papa, 6.30PM-7.30PM Registration and Exhibition Space 3.00PM -7.30PM, Oceania, Level 3, Te Papa</td>
</tr>
</tbody>
</table>

**Sunday 7 December 2014**

- **9:00 – 4:30**
  - **Session 1A**
    - Collaborative Pathways
  
  **Session 1B**
  - Global Competitive Supply of Engineers
  
  **Session 1C**
  - Student Engagement & Retention

- **10:00 – 10:30**
  - **Morning Tea**

- **11:30 – 1:00**
  - **Lunch**

- **1:30 – 3:00**
  - **Workshop 1A**
    - Solving wicked sustainability problems: What specific knowledge and skills do students need to have to solve modern sustainability issues and those of the future?
  
  **Workshop 1B**
  - Addressing the Publication Review Criteria for the IEEE Transactions on Education TALE

- **3:30 – 5:00**
  - **Workshop 1A (continue)**
    - Solving wicked sustainability problems.
  
  **Workshop 1B (continue)**
  - What goes on, comes around: Exploring the affordances of engineering laboratory venues and how to interpret these for proposed face-to-face and online venues.

**Monday 8 December 2014**

- **9:00 - 10:00**
  - **Maori Welcome: 8:30AM**
    - Steve Maharey – Vice-Chancellor, Massey University. Official Opening
  
  **Sounding Theatre, Level 2**
  - Keynote Speaker Professor Alison Halstead – Sponsored by AKO Aotearoa
  
  **Collaborative Pathways: How do we ensure that all learners are enabled to make connections across areas of learning that support an education in engineering?**

- **10:00 - 10:30**
  - **Morning Tea – Oceania, Level 3, Te Papa**

- **10:30 - 12:00**
  - **Session 1A**
    - Collaborative Pathways
  
  **Session 1B**
  - Electrical Engineering
  
  **Session 1C**
  - Global Competitive Supply of Engineers
  
  **Session 1D**
  - Student Engagement & Retention
  
  **Session 1E**
  - Introductory Engineering & Computing Courses & Learning Management Systems TALE
  
  **Session 1F**
  - Assessment and Evaluation-1 TALE
  
  **Session 1G**
  - Teaching Approaches-1 TALE

- **12:00 - 1:30**
  - **Lunch – Oceania, Level 3, Te Papa**

- **1:30 - 3:00**
  - **Workshop 1A**
    - Solving wicked sustainability problems: What specific knowledge and skills do students need to have to solve modern sustainability issues and those of the future?
  
  **Workshop 1B**
  - Preparing Students for Gendered Workplaces
  
  **Workshop 1C**
  - Supporting diverse student cohorts through their engineering studies

- **3 - 5:00**
  - **Workshop 1A (continue)**
    - Solving wicked sustainability problems.
  
  **Workshop 1B (continue)**
  - What goes on, comes around: Exploring the afforadances of engineering laboratory venues and how to interpret these for proposed face-to-face and online venues.

- **3:30 – 5:00**
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  **Workshop 1B**
  - Cultivating Curiosity: Improving Metacognition and Motivation and Revealing Misconception s in Engineering Students
  
  **Workshop 1C**
  - What goes on, comes around: Exploring the affordances of engineering laboratory venues and how to interpret these for proposed face-to-face and online venues.

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  - What goes on, comes around: Exploring the afforadances of engineering laboratory venues and how to interpret these for proposed face-to-face and online venues.
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<tr>
<td>9:00 - 10:00</td>
<td>Registration 8:00AM – 5:00PM</td>
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<td>Oceania, Level 3, Te Papa Tongarewa National Museum of New Zealand</td>
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<tr>
<td>9:00 - 10:00</td>
<td>Keynote Speaker: Tim Fowler</td>
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<td>Chief Executive, Tertiary Education Commission, New Zealand</td>
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<td>Sounding Theatre, Level 2, Te Papa</td>
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<tr>
<td></td>
<td>Growing the engineering education to employment pipeline: Reflections and future directions</td>
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<td>10:00 - 10:30</td>
<td>Morning Tea – Oceania, Level 3, Te Papa</td>
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<td>10:30 - 12:00</td>
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<td>Rangimarie 2</td>
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<td>10:30 - 12:00</td>
<td>Session 4A</td>
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<td>Global Competitive Supply of Engineers</td>
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<td>Chair: Assoc/Prof Jane Goodyer</td>
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<td>Collaborative Pathways</td>
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<td>Chair: Dr Lynette Brodie</td>
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<td>Chair: Prof David Dowling</td>
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<td>Session 4D</td>
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<td>Educational Policy, Leadership and Development-1 TALE</td>
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<td>Chair: Dr Willie Ofosu</td>
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<td>Session 4E</td>
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<td>Educational Policy, Leadership and Development-2 TALE</td>
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<td>Chair: Dr David Long</td>
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<td>12:00 - 1:30</td>
<td>AAEE AGM</td>
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<td>Oceania North, Level 3, Te Papa</td>
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<td>1:30 - 3:00</td>
<td>Workshop 5A</td>
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<td></td>
<td>MATLAB &amp; Simulink for Project-Based Learning using LEGO MINDSTOR MS NXT-</td>
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<td>Chair: Prof David Lowe</td>
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<td>Student Engagement &amp; Retention (Electrical Engineering)</td>
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<td>Chair: Dr Simon Spacey</td>
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<td>Assessment and Evaluation-3 TALE</td>
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<td>Chair: Dr Jiangang Fei</td>
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<td>3:00 - 3:30</td>
<td>Workshop 5D</td>
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<td>Toward a Modern Curriculum for Computer Engineering - Part1</td>
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<td>Chair: Dr Venky Shankaraman</td>
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<td>3:30 - 5:00</td>
<td>Workshop 5E</td>
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<td>Reflective Practice in 3 Domains</td>
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<tr>
<td>6:30 - 10:30</td>
<td>AAEE Conference Dinner and Awards</td>
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<td>Westpac Stadium (transport departing Te Papa at 6.00PM)</td>
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<td>TALE Conference dinner</td>
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<td>Foxglove, Tuesday 9th December</td>
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</table>
**DAY 3: Wednesday 10 December, 2014**

**Registration 8:00AM – 5:00PM**

**Te Papa Tongarewa National Museum of New Zealand**

Keynote Speaker: Professor Roger Hadgraft – Sponsored by Otago Polytechnic

**Sounding Theatre, Level 2, Te Papa**

Reinventing Engineering Curricula for Personalised Learning

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Location</th>
<th>Speaker(s)</th>
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<tr>
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<td>10:00-10:30</td>
<td>Special topic session 1A</td>
<td>Sounding Theatre</td>
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<td>Creating Community Change – Llew</td>
<td>Special topic session 2A</td>
<td>Employment of Cloud Teaching to Help Students Develop Technical Report Writing Competency - Judy Chen</td>
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<td>Special topic session 3A</td>
<td>Approaches to Applied Learning – Antony Dekkers</td>
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<td>Special topic session 4A</td>
<td>Reinventing online engineering education... introduction to the Adaptive Mechanics Network - Smart Sparrow</td>
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<td>Special topic session 5A</td>
<td>1, An industry oriented math teaching strategy for the Metro Group BEngTech program 2, An industry oriented course development for the Master of Engineering Chair: Dr Tom Qi</td>
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<td>Special topic session 6A</td>
<td>1, Integrating Ecology into the Environmental Engineering Curriculum – The Importance of Engagement 2, The use of Project Based Learning in Engineering Fundamentals Chair: Prof Margaret Greenway</td>
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<td>Special topic session 7A</td>
<td>1, Enhancing Motivation for Homework exercises in Engineering Mathematics Class 2, Improving Success in Engineering Calculus: Design of a Bridge Program Chair: Dr Jason Ng</td>
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<td>10:30 - 11:00</td>
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<td>Morning Tea– Oceania, Level 3, Te Papa</td>
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<td>11:00-12:30</td>
<td>Session 7A</td>
<td>Session 7B</td>
<td>General Theme</td>
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<td>Student Engagement &amp; Retention (Mechanical Engineering)</td>
<td>Work in Progress</td>
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<td>Chair: Assoc/Prof Gourab Sen Gupta</td>
<td>Chair: Assoc/Prof Lydia Kavanagh</td>
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<td>Chair: Prof Judy Chen</td>
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<td>12:30 - 1:30</td>
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<td>Lunch– Oceania, Level 3, Te Papa</td>
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<td>Session 8A</td>
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<td>Student Engagement &amp; Retention (Software Engineering)</td>
<td>Work in Progress</td>
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<td>Chair: Dr Patricia Kelly</td>
<td>Chair: Ms Jo Devine</td>
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<td>Chair: Dr Prue Howard</td>
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<td>3:30 - 5:00</td>
<td>Session 9A</td>
<td>Session 9B</td>
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<td>Chair: Dr Llew Mann</td>
<td>Chair: Mr John Findlay</td>
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<td>Chair: Dr Tom Qi</td>
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<td>5:00 – 5:30</td>
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<td>Wrap Up and Conference Closing</td>
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<td>Sounding Theatre, Level 2, Te Papa</td>
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Creating Community Change – Llew Mann

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 Session 7A
Student Engagement & Retention (Mechanical Engineering)
Chair: Assoc/Prof Gourab Sen Gupta

 Session 7B
General Theme

 Session 7C
Work in Progress

 Session 7D
Student Engagement & Retention
Chair: Dr Lesley Jolly

 Session 7E
Online/E-Learning and Blended Learning and Distance, Open and Flexible Education
TALE Chair: Dr Elke Mackensen

 Session 7F
Industry Partnerships, Work-Integrated Education
TALE Chair: Prof. Dale Carnegie

 Session 7G
Engagement and learning for the Intelligent campus’ (EBTIC’s selected papers) TALE Chair: Dr Jason Ng

 Session 8A
Student Engagement & Retention (Software Engineering)
Chair: Dr Patricia Kelly

 Session 8B
Work in Progress

 Session 8C
Work in Progress

 Session 8D
Work in Progress on Student Engagement & Retention
Chair: Prof Douglas Hargreaves

 Session 8E
Computer-Based Learning and Courseware Technologies-1
TALE Chair: Dr Andrew Nafalski

 Session 8F
Curriculum Design and Pedagogy-1 TALE Chair: Dr Mani Nallasamy

 Session 8G
Engaging, Evaluating and Motivating Learners-2 TALE Chair: Dr Sascha Nikolic

 Session 9A
Student Engagement & Retention (Mechanical Engineering)
Chair: Dr Llew Mann

 Session 9B
General Theme

 Session 9C
General Theme

 Session 9D
Student Engagement & Retention
Chair: Dr Sally Male

 Session 9E
Computer-Based Learning and Courseware Technologies-2
TALE Chair: Craig Watterson

 Session 9F
Teaching Approaches-2 TALE Chair: Prof. Dale Carnegie

 Session 9G
Engagement and learning for the Intelligent campus’ (EBTIC’s Keynote and Roundtable) TALE Chair: Dr Jason Ng

 Wrap Up and Conference Closing
Sounding Theatre, Level 2, Te Papa
### Session 1A - Collaborative Pathways

**Soundings Theatre**  
Chair: Associate Professor Colin Kestell

1. Robotics Education in Primary Schools: A Tasmanian Case  
*Chen, Y.*, *Faulkner, G.*

2. Enhancing Industry Exposure, Discovery-Based and Cooperative Learning in Mechanics of Solids  

3. Integrating Writing and Structural Engineering – An Exploration  
*Lloyd, N.*, *Ramiah, R.*

*Lind, G.*, *Seaford, J.*

5. Developing a Business Case for New Programs: A National Case Study for Associate Degrees  
*Seaford, J.*, *Ayers, R.*, *Lind, G.*

### Session 1B - Electrical Engineering

**ICON**  
Chair: Dr Gerard Rowe

1. Student Experience of Project and Design Centred Curriculum  
*Chandran, J.*, *Chandrasekaran, S.*, *Stojcevski, A.*

2. Automatic Circuit Analysis Problem and Solution Generation  
*Macindoe, J.*, *Li, J.C.*

3. Lessons learned from adopting external online materials for an existing on-campus course  
*Moors, T.*

4. Work Integrated Learning in Electrical Engineering at a distance Education Institution: Opportunities and Challenges  
*Nickola, G.*, *Swart, J.*

5. A Project to Adopt Technology in Electrical Engineering and Computing Units: Participants Experience  
*Ortega-Sanchez, C.*, *Taylor, D.*

6. Development of Laboratories with Virtual and Real Elements for Better Preparation of Telecommunications Engineers  
*Lopez-Bautista, M.C.*, *Castro-Martinez, A.N.*, *Gonzalez-Tinoco, J.E.*, *Khotiaintsev, S.*
### Session 1C – Global Competitive Supply of Engineers

**Oceania North**

**Chair: Dr George Banky**

1. Can Simple Ideation Techniques Enhance Idea Generation?  
   **Belski, I., Hourani, A., Valentine, A., Belski, A.**

2. Do Statutory and Professional Bodies in South Africa Threaten Academic Freedom at Universities: a Perspective from the Engineering Profession  
   **De Jager, H.J., Emuze, F.**

3. Holistically approaching curriculum renewal: A case study of the Queensland University of Technology  
   **Desha, C., Senadjii, B.**

4. Lifelong Learning Skills as Essential Attribute for Engineering Graduates  
   **Uziak, J., Walczak, M., Oladiran, M.T., Gizejowski, M.**

5. Invisible writing (practices) in the engineering curriculum?  
   **Goldsmith, R., Willey, K.**

6. An evaluation of the impact of using authentic design and build industry projects in project-based learning  
   **Ferguson, C., Palmer, S.**

### Session 1D – Student Engagement & Retention

**Oceania South**

**Chair: Dr Andrew Bainbridge-Smith**

   **Chang, C-C. Liao, Y.**

2. Ten years on: An evaluation of the success of the Master of Engineering Practice program  
   **Dowling, D.**

3. Inspiring and stimulating students to learn mechatronics (robotics) through authentic projects and co-curricular activities  
   **Kodagoda, S.**

4. How to teach first-year engineering students to learn computing and programming effectively?  
   **Zhang, H., Lemckert, C.**

5. Training tutors for undergraduate courses in engineering: The importance of context  
   **Kavanagh, L., Papinczak, T., O’Moore, L.**

6. Comparison of use of Echo360 generated materials in maritime engineering and nursing disciplines to support student learning  
   **Chin, C.K.H., Fei, J., Mather, C., Caesar, L.**
Monday 8 December 2014

Session 1E - Introductory Engineering and Computing Courses and Learning Management Systems (TALE)
Angus Room

1. Benefits and Introduction to Python Programming for Freshmore Students Using Inexpensive Robots
   Yoong, C.H.
2. Knowledge transfer model to optimize the use of virtual learning objects
   Medina Garcia, V.H., Rodriguez Guerrero, R.
3. Student Engagement and Learning using an Integrated Student-Lecturer Engagement Framework
   Yoong, C.H.
4. Using Interactive Technology for Lectures in Higher Education Information Technology
   Spence, A.M., McKenzie, S.
5. An Implementation of CDIO/Design Thinking in Mechatronics Project
   Sripakagorn, A., Chancharoen, R., Maneeratana, K., Panyajirakul, K.

Session 1F - Assessment & Evaluation – 1 (TALE)
Rangimarie 1

1. Using iPads/Tablets as a Teaching Tool: Strategies for an Electrical Engineering Classroom
   Ravishankar, J., Epps, J., Ladouceur, F., Eaton, R., Ambikairajah, E.
2. Online Behaviour of Students in a New Blended Learning Course: An Experience Report
   Zafar, S., Safdar, S., Malik, B.
3. Students’ perception in the use of self-made YouTube videos in teaching Mathematics
   Faye, I.
4. Individual Evaluation For Freshman in Small Size Group
   Dong, Z., Fan, H., Zhang, M., Ye, L., Song, J., Wang, Q., Tang, Y.
Session 1G – Teaching Approaches - 1 (TALE)
Rangimarie 2
Chair: Dr Stuart Marshall

1. Fit4PracSis: A competence-, business- and science-orientated education approach for freshman students in interdisciplinary degree programs
   Mackensen, E., Lurz, C., Reichert, A.
2. A Reverse Engineering Approach to Teach Biology Students Mathematical Complexity in Ecology - Interdisciplinary teaching connects mathematical literacy and outdoor practice
   Silapachote, P., Srisuphab, A., Srikosamatara, S.
3. Teaching Skills of Engineering Courses with Strong Mathematical Elements for Undergraduate Students
   Tong, M., Gu, R., Zhang, J., Zhang, Y.
4. A Sustainable Approach to Attracting, Retaining and Supporting Women in Undergraduate Electrical Engineering
   Allen, P., Ravishankar, J.
5. Hong Kong secondary education reform and its impact on social and cultural awareness
   Lam, D., So, J., Ng, K.W.

Workshop 1A
Soundings Theatre
Solving wicked sustainability problems: What specific knowledge and skills do students need to have to solve modern sustainability issues and those of the future?
Rosano, M., Hadgraft, R. King, R.

Workshop 1B
ICON
Addressing the Publication Review Criteria for the IEEE Transactions on Education
Froyd, J.F.

Workshop 1C
Oceania North
Preparing Students for Gendered Workplaces
Male, S., Bennett, D., Figueroa, E., Gardner, A., Khan, N., MacNish, C., Maynard, N., Willey, K.

Workshop 1D
Oceania South
Supporting diverse student cohorts through their engineering studies
Brodie, L., Devine, J., Newman, T.
Monday 8 December 2014

Session 2E – Work in Progress
Angus Room
Chair: Dr Dorothy Missingham

1. Facilitating student progression through partnerships with industry professional associations
   Pienaar, J., Adams, N., Greensill, C.
2. Transforming multiple stakeholder insights into education action: Developing a pragmatic EIT professional advisory framework
   Ang, K.C.S., Aubrey, T.
3. Let's do it: A framework to investigate the affordances of experiential learning environments
4. Australian Indigenous Culture and Heritage in Engineering Project Planning and the Implications for Engineering Education
   Goldfinch, T., Ilango, A., Roland, A., Willis, J.
5. Cementing engineering student engagement through early program exposure to industry practice using aligned project case studies presented by industry professionals
   Walker, A., Stewart, R.A., Panuwatwanich, K.
6. Engineering Pathways for Regional Australia built through Knowledge Partnering
   Symes, M., Allison, J., Dowling, D., Ranmuthugala, D., Broun, D.

Session 2F – Curriculum Design and Pedagogy – 2 (TALE)
Rangimarie 1
Chair: Dr Phillip Allen

1. Investigation-in-progress on how to effectively use tablet terminals in science experiment classes performed by a student project team
   Hasegawa, M., Teshima, S.
2. Integrating Computer Security into the Undergraduate Software Engineering Classes: Lessons Learned
   Pancho-Festin, S., Mendoza, M.J.
3. A Design Project Based Approach to Teaching Undergraduate Instrumentation
   Long, D.S., McKay, T.G.
4. Understanding career aspirations of Information Technology students at Deakin University
   McKenzie, S.C., Palmer, S., Coldwell-Neilson, J., Coleman, K.
5. Feasibility study on evaluation of audience’s concentration in the classroom with deep convolutional neural networks
   Yoshihashi, R., Shimada, D., Iyatomi, H.
Monday 8 December 2014

Session 2G – Educational Resources, Distance, Open and Flexible Education (TALE)
Rangimarie 2

Chair: Dr Bryan Ng

1. Training Laboratory: Using online resources to enhance the laboratory learning experience
   Nikolic, S.

2. Facilitating Access to Course Contents During War Situation with M-Learning and Cloud Computing Technologies
   Wannous, M., Nakano, H., Mahfuri, M., Nagai, T.

3. Work in Progress: Simple software solution for accessing remote lab on mobile devices
   Samuelsen, D.A.H., Bjørk, J., Graven, O.H.

   Kautsar, I.A., Kubota, S.-I. Musashi, Y., Sugitani, K.

5. Familiarity breeds understanding: Recommending explanatory analogies to learners
   Kumar, V., Bhat, S.S., Pedanekar, N.

Workshop 1A (cont’d)
Soundings Theatre

Solving wicked sustainability problems: What specific knowledge and skills do students need to have to solve modern sustainability issues and those of the future?
Rosano, M., Hadgraft, R., King, R.

Workshop 1B (cont’d)
ICON

Addressing the Publication Review Criteria for the IEEE Transactions on Education
Froyd, J.E.

Workshop 2C
Oceania North

What goes on, comes around: Exploring the affordances of engineering laboratory venues and how to interpret these for proposed face-to-face and online venues.

Workshop 2D
Oceania South

Cultivating Curiosity: Improving Metacognition and Motivation and Revealing Misconceptions in Engineering Students
Kowalski, F.V., Kowalski, S.E.
Monday 8 December 2014

Session 3E – Work in Progress on Student Engagement & Retention
Angus Room

Chair: Dr Tom Qi

1. Outcomes of blending project-based and traditional lecture-based teaching approaches in engineering education at the United Arab Emirates University
   Chowdhury, R.K.
2. Shared Values: Diverse perspectives – engaging engineering educators in integrating Indigenous engineering knowledge into current curricula
   Leigh, E., Goldfinch, T., Prpic, J.K., Dawes, L., Kennedy, J., McCarthy, T.
3. The MeLTS Audience Response System: Student Reception, Benefits and Usage
   Sherburn, N., Ng, S., Evans, J.S., Li, J.C.
4. A preliminary investigation of student collaboration to create resources that motivate the relevance of mathematics to first year engineers
   Loch, B., Lamborn, J.
5. Strategies to encourage and retain women in engineering: A case study approach
   Mendoza, A., Karunasekera, S., Wright, S.
6. Development of a Bachelor Degree Program for Skilled Students
   Lee, W-C., Qi, Z.T.

Session 3F – Collaborative Pathways
Rangimarie 1

Chair: Dr Elizabeth Godfrey

1. CDIO– can it be adapted for Distance Education?
   Brodie, L., Brodie, I., Lucke, T.
2. High-Impact Engineering Education: Using the LTI to Influence Knowledge and Skills for Sustainable Economy
   Alehossein, H.
3. The Influence of working memory and practice on student success in Engineering Mathematics
   Shepstone, N.
4. A Study on the Pre-Service Teachers’ STEM Interdisciplinary Teaching Intention
   Lin, K., Williams, P.J.
5. Improving Industry Engagement in Engineering Degrees
   Male, S., King, R.
6. Developing Industry-Oriented Teaching Materials for Industrial Safety Management
   Wu, T., Chen, C., Lin, C.
1. Flipping an Engineering Mathematics Classroom for a Large Undergraduate Class  
   Gullayanon, R.
2. Technology intervention in neurorehabilitation - A practical approach to teaching  
   Hussain, A., Tommasino, P., Hughes, C., Gamage, W.G., Kumudu C., Dailey, W., Burdet, E., Campolo, D.
3. A Proposal for using Design Science in Small-Scale Postgraduate Research Projects in Information Technology  
   Strode, D.E., Chard, S.M.
4. Development of e-learning based module for teaching practicals in electronics to science and engineering students in India  
   Kabra, S., Kapoor, A., Dua, H.
5. An Arduino Kit for Learning Mechatronics and its Scalability in Semester Projects  
   Chancharoen, R., Sripakagorn, A., Maneeratana, K.
Tuesday 9 December 2014

Session 4A – Global Competitive Supply of Engineers
Sounding Theatre
Chair: Associate Professor Jane Goodyer

1. Analysis of Employability skills for Civil Engineers in New Zealand
   Sharma, M., De Costa, G., Heyzer, D.
2. Transforming engineering students into student engineers through multi-course project-based learning
   Foley, B., Willis, C.
3. The university sector and the water industry – are we integrating the two for effective education?
   Lemckert, C., Gamaethige, M., Carney, C.
4. Pictures and words: Data collection proposal to investigate the affordances of current experiential learning environments
   Vcelka, M., Banky, G.P.
5. Developing Professional Skills: You can't leave it all for final year!
   Mills, J.E., Smith, E.
6. Typical roles and activities of Civil Engineering Technicians and Technologists in their first three years after graduation.
   Wilson, H.

Session 4B – Collaborative Pathways
ICON
Chair: Dr Lynette Brodie

1. Supporting students through the final year engineering project experience to achieve AQF8 outcomes
   Martin, F., Hadgraft, R., Stojcevski, A., Lawson, J.
2. Contextualising research in AQF8 for engineering education
   Lawson, J., Hadgraft, R., Jarman, R.
3. Assessment of Final Year Engineering Projects – an AQF8 perspective
4. Final Year Engineering Projects: Improving assessment, curriculum and supervision to meet AQF8 outcomes
   Lawson, J., Hadgraft, R., Rasul, M.
5. Guidelines for Curriculum development of Final Year Engineering Projects to support achievement of AQF8 Outcomes
   Howard, P., Kestell, C., Rasul, M., Lawson, J.
6. Peer Assessment barriers faced by international students engaging in project-based courses
   Chen, S., Kavanagh, L.
## Tuesday 9 December 2014

### Session 4C – Collaborative Pathways

**Oceania North**

**Chair: Professor David Dowling**

1. The Accidental Collaborator: Participatory Action Research as an Emergent Framework for Sustainable Multi-stakeholder Engagement  
   **Ang, K.C.S.**
2. Building long-term capability in the Australian minerals industry - The MINAD project  
   **Ayers, R., Dowling, D., Lind, G.**
3. Innovative Industry Engaged Project-Based Learning for Civil Engineering Structural Design  
   **Lloyd, N., Bland, K.**
4. Navigating Pathways for Academic Staff Development: Implications for Institutions and Academic Ranks  
   **Boles, W., Goncher, A.**
5. An Industry-Based Project in an Engineering Dynamics Course  
   **Uddin, M., Male, S.**
6. A Program Level Approach to Community-Centred Engineering Education  
   **Smith, J., Browne, C.**

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### Session 4D – Educational Policy, Leadership and Development – 1 (TALE)

**Oceania South**

**Chair: Dr Willie Ofosu**

1. The Knowledge and Practice of "New Academia" Among Lecturers: A Case Study in Universiti Teknologi Malaysia  
   **Surif, J., Ibrahim, N.H., Abdullah, A.H., Zainal, N.A.**
2. Uptake of lecture capture technology by lecturers in engineering, management and nursing disciplines  
   **Fei, J., Chin, C., Caesar, L., Mather, C.**
3. Cyclic Improvement in the Implementation of Reflective Practice  
   **Ibrahim, N.H., Surif, J., Abdullah, A.H.**
4. From the Environment to the Classroom: A Sub-Saharan African Scenario  
   **Ofosu, W.K., Tchao, E.T.**
Tuesday 9 December 2014

Session 4E - Educational Policy, Leadership and Development – 2 (TALE)
Angus Room  
Chair: Dr David Long

1. Leadership Assignation for Knowledge Sharing Amongst Mara Technical Colleges Directors  
   Tahir, L., Abdullah, M.H.A.
2. Implementing Outcomes-Based in Electronics Engineering of Batangas State University: Motivations, Processes, Challenges  
   Ronquillo, D.G.D., Ronquillo, T.A.
   Fawad, H.

Session 4F – Assessment and Evaluation – 2 (TALE)
Rangimarie 1  
Chair: Dr Venky Shankaraman

1. Non-routine Mathematical Problems among In-Service and Pre-Service Mathematics Teachers  
2. Aligning Assessments with Competencies using Keyphrase Extraction  
   Shankaraman, V., Gottipati, S.
3. Physics problem solving: Selecting more successful and less successful problem solvers  
4. Novel Approach for Perception Analysis In a Learning Environment  
5. Exploring the Online Interactions in Social Software  
   Lin, F., Lin, D.
### Session 4G – Student Engagement & Retention (Civil Engineering)

Rangimarie 2

**Chair:** Professor Mark Milke

1. Effectiveness of on-line resources to enhance student learning and engagement  
   *Fernando, A., Egodawatta, P.K.*

2. Experiences with flipped learning in subjects in consecutive stages of a Civil Engineering programme  
   *Gardner, A., Willey, K., Vassalas, K., Li, J.*

3. Reflections on Different Pricing Strategies for Engineering Degrees and Potential Impacts on Employability of Graduates  
   *El Hanandeh, A.*

4. Differences in First Year Gender Engagement Through Cross-Disciplinary Design Projects  
   *Marasco, E., Behjat, L., Eggermont, M.*

5. The Lecture Checklist: Inexpensively Improving Teaching Performance  
   *Sinha, R., Rowe, G.B.*

6. Predicting Student Success in Statics  
   *Wilson, K.F., Low, D.J.*

### Workshop 5A

**Soundings Theatre**

MATLAB & Simulink for Project-Based Learning using LEGO MINDSTORMS NXT  
*Horton, B.*

### Workshop 5D

**Oceania South**

Toward a Modern Curriculum for Computer Engineering - Part1 (TALE)  
*Impagliazzo, J., Durant, E.*

### Workshop 5E

**Angus Room**

Reflective Practice in 3 Domains  
*Kaya Prpic, J.*

### Workshop 5F

**Rangimarie 1**

Thinking Like an Engineer  
*Missingham, D., Cheong, M., Tonkin, M., Matulessya, S., Lowe, S., Cook, T., Ashby, R.*

### Workshop 5G

**Rangimarie 2**

**Chair:** Dr Heny Chan

TALE Special Session on Computer Education by IEEE Computer Society
Tuesday 9 December 2014

Session 5B – Student Engagement & Retention (Electrical Engineering)
ICON

Chair: Professor David Lowe

1. Student-Created Dynamic (Video) Worked Examples as a Path to Active Learning
   Belski, I., Belski, R.

2. Impact of student’s goal orientation in a flipped learning environment
   Willey, K., Gardner, A.

3. First Year Electronics Not Only for First Year Electronics Students - How to Ensure Engagement Through Innovation
   Horan, B., Chandrasekaran, S., Stojcevski, A., Littlefair, G.

4. Making Student Experts within a Flipped Mechatronics Class
   Joordens, M., Horan, B.

5. Enhancing Classroom Learning by Coupling Interactive Computer Simulations with Real-Time Formative Assessment through Technology-Mediated Open-Format Questioning
   Kowalski, F.V., Kowalski, S.E.

6. ConTag (Contextual Tags) in Video-based Collaborative Learning
   Rosli, A.N., Supandi, I.A., Lee, K., Jo, G.

Session 5C – Assessment and Evaluation – 3 (TALE)
Oceanica North

Chair: Dr Simon Spacey

1. Transformations to Issues in Teaching, Learning, and Assessing Methods in Databases Courses
   Rashid, T.A., Al-Radhy, R.S.

2. Simple Rules For Identifying Students On the Edge
   Klapaukh, R., Homer, M.

3. Analysis of moderation practices in a large STEM-focused faculty
   Czaplinski, I.A., Adie, L., Senadjii, B., Beutel, D.

4. Quantitative Analysis based Criteria for Evaluating Simple Class Diagrams made by Novices for Conceptual Modeling
   Kayama, M., Masumoto, K., Ogata, S., Asano, D., Hashimoto, M., Otani, M.

5. Automatically Growing Dually Adaptive Online IRT Testing System
   Hirose H., Aizawa, Y.
Workshop 5A (cont’d)
Soundings Theatre
MATLAB & Simulink for Project-Based Learning using LEGO MINDSTORMS NXT
Horton, B.

Workshop 5D (cont’d)
Oceania South
Toward a Modern Curriculum for Computer Engineering – Part 2 (TALE)
Impagliazzo, J., Durant, E.

Workshop 6E
Angus Room
Good practice guidelines for curriculum, supervision and assessment of final year engineering projects and AQF8 learning outcomes

Workshop 6F
Rangimarie 1
Indigenous engineering, a pathway to reconciliation/Intercultural competence?
Leigh, E., Goldfinch, T., McCarthy, T., Kennedy, J., Dawes, L., Kaya Prpic, J.

Session 6B – Assessment and Evaluation – 4 (TALE)
ICON
Chair: Dr Susan E. Kowalski

1. Dually Adaptive Online IRT Testing System with Application to High-School Mathematics Testing Case
Hirose, H., Aizawa, Y., Tokusada, Y., Noguchi, K.
2. Embedded Formative Assessment in the Undergraduate Engineering Classroom
Kowalski, F.V., Kowalski, S.E.
3. Using Rubrics in IT: Experiences of Assessment and Feedback at Deakin University
McKenzie, S.C., Wood-Bradley, G.
4. Standard Setting in Students Assessment of Higher Education Institution in Malaysia
Khatimin, N., Abd Aziz, A., Zaharim, A.
Tuesday 9 December 2014

Session 6C – Engaging, Evaluating and Motivating Learners - 1 (TALE)
Oceania North

Chair: Dr Jiangang Fei

1. Study of Motivational Constructs, Learning Orientations and Goals Affecting Engineering Students' Learning Process

2. Effects of Abstract Thinking Level and Familiarity with Programming Languages on Computer Programming Ability in High Schools
   Park, C.J., Hyun, J.S.

3. Utilizing Semantic Web Technologies and Data Mining Techniques to Analyse Students Learning and Predict Final Performance
   Grivokostopoulou, F., Perikos, I., Hatzilygeroudis, I.

4. A New Approach in Organizing a Seminar Course for Master Students
   Maneeratana K., Rungsup, S., Chancharoen, R.

Session 6G

TALE Special Session on Computer Education by IEEE Computer Society

Chair: Dr Heny Chan

Rangimarie 2

1. Factors Influencing Student Learning in Portfolio Assessed Introductory Programming
   Cain, A.

   Spacey, S.

3. Skills Frameworks for Industry and IT Education Alignment: A Pilot Study
   Asgarkhani, M., Shankararaman, V.

   Hutabarat, B.I.
Wednesday 10 December 2014

Special Topic Session 1A
Sounding Theatre
Creating Community Change: AAEE Member's Voices within a Shifting Landscape
Facilitator: Llewellyn Mann

Special Topic Session 2A
ICON
Employment of Cloud Teaching to Help Students Develop Technical Report Writing Competency
Facilitator: Judy Chen, Clyde Warden

Special Topic Session 3A
Oceania North
Approaches to Applied Learning
Facilitator: Prue Howard, Fae Martin, Antony Dekkers

Special Topic Session 4A
Oceania South
Reinventing online engineering education... introduction to the Adaptive Mechanics Network.
Facilitator: Smart Sparrow

Special Topic Session 5A
Angus Room
Chair: Dr Tom Qi
1. An industry oriented math teaching strategy for the Metro Group BEngTech program
   Qi, Z.T., Louie, K., Cook, F., Robson D. and Hogan D.
2. An industry oriented course development for the Master of Engineering
   Qi, Z.T.

Special Topic Session 6A
Rangimarie 1
Chair: Associate Professor Margaret Greenway
1. Integrating Ecology into the Environmental Engineering Curriculum – The Importance of Engagement
   Greenway, M.
2. The use of Project Based Learning in Engineering Fundamentals
   Harris, T.

Special Topic Session 7A
Rangimarie 2
Chair: Dr Ramadas Narayanan
1. Enhancing Motivation for Homework exercises in Engineering Mathematics Class
   Narayanan, R.
2. Improving Success in Engineering Calculus: Design of a Bridge Program
   Nite, S.
Wednesday 10 December 2014

Session 7A – Student Engagement & Retention (Mechanical Engineering)

Sounding Theatre

Chair: Associate Professor Gourab Sen Gupta

1. Investigating the Effectiveness of Lecture Capture on Teaching and Learning
   Rahman, A., Hossain, M.J.

2. Increasing pass rates in introductory mechanics courses
   Jowitt, A.

3. Novel use of video technology to enhance the use of marine simulators to link knowledge and practical skills
   Narayanasamy, S., Garaniya, V., Chin, C.K.H., Ranmuthuga Salter, S.

4. Statistical analysis of correlation between students’ personal characteristics and academic success in Engineering Mechanics course
   Shaeri, S., Guan, H., Howell, S.

5. The Adaptive Virtual Workshop: Maintaining student engagement through an on-line adaptive resource for engineering design education

6. Peer learning and deep learning through online discussion boards
   Zhu, Y., Dao, D.

Session 7B - General ICON

Chair: Associate Professor Lydia Kavanagh

1. The importance of narrative: helping students make sense of what they're learning
   Kavanagh, L., Reidsema, C.

2. The Learning Pathway: Online Navigational Support for Students within the Structured Flipped Classroom
   Reidsema, C., Kavanagh, L., Fink, E., Long, P., Smith, N.

3. Outcomes for students working in industry
   Blicbua, A.S., Nelson, T.L., Dini, L.

4. Measuring Creativity in Die Manufacturing Courses for Technological and Vocational Education
   Chen, D., Lai, B., Lee, C.

5. Didactic strategies for final year projects
   Pons, D.J.

6. Graduating Students’ Perceptions of Learning Design in an Undergraduate Engineering Course
   Nepal, K.P.
Wednesday 10 December 2014

Session 7C – Work in Progress

Oceania North

Chair: Professor Judy Chen

1. Female Engineering Students’ Perceptions of Recruitment Motivation and Career Development: A Preliminary Study
Chou, P.

2. Teacher Reflection on Practice: Teaching Engineering Design Modules in High Schools of Taiwan
Fan, S.C., Yu, K.C.

3. Using multidimensional scaling to organize expected outcomes of engineering education
Hadgraft, R.G., Tilstra, H., Thebuwana, H.

4. Integrating ‘role play’ in assessment to strengthen professional conduct and accountability of students: a pilot study
Rainey, T., Jayasuriya, K., Gottlieb, U.

5. Classroom Seating Arrangement Based on Optimization Theory
Shin-Ike, K.

6. A statistical analysis of student backgrounds at a regional university
Devine, J., Wandel, A.P.

Session 7D – Student Engagement & Retention

Oceania South

Chair: Dr Lesley Jolly

1. Engineering students’ perceptions of engineers and engineering work
Bennett, D., Maynard, N., Kapoor, R., Kaur, R.

2. Staying the Distance - Strategies to Improve Student Retention
McBride, W., Downing, N., Pring, R.

3. The Application of Design Methods in Projects to enhance Student Engagement
Karmokar, S., Shekar, A.

4. Investigations into Students’ Information Sourcing Patterns in a Postgraduate Blended Learning Course
Miller, G., Donald, C.

5. A student project development for multidisciplinary programs at Otago Polytechnic
Finnie, D., Fersterer, C., Qi, Z.T., Terpstra, C.

6. Teaching Logic and Decision Making Using Probability & Statistics Course
Budiman, R.A.
Wednesday 10 December 2014

Session 7E - Online/E-Learning and Blended Learning and Distance, Open and Flexible Education (TALE)
Angus Room

Chair: Dr Elke Mackensen

1. Developing a self-regulated oriented online programming teaching and learning system
   Huang, T.-C., Shu, Y., Chang, S.-H., Huang, Y.-Z., Lee, S.-L., Huang, Y.-M., Liu, C.-H.

2. Time Scheduling in a Peer-to-Peer Remote Access Laboratory for STEM Education
   Maiti, A., Kist, A.A., Maxwell, A.D.

3. The Use of Echo360 generated materials and perceived student performance
   Fei, J., Caesar, L., Mather, C., Chin, C.

Session 7F - Industry Partnerships, Work-Integrated Education (TALE)
Rangimarie 1

Chair: Professor Dale Carnegie

1. A unique Orbital IC engine, illustrating advantages of Engineering to Academia relationships
   Harris, G.R.

2. Analog IC Test and Product Engineering Curriculum For Malaysia Microelectronics Industry
   Kamsani, N.A., Mohd Sidek, R., Yeo, C.W., Gan, D., Krishnasamy, S., Lee, Y.M., Quek, C.T., Bolanos, M.

   Ruayruay, E.

   Kobata, K., Uesugi, T., Adachi, H., Aoyama, M.
Wednesday 10 December 2014

Session 7G - Engagement and learning for the Intelligent campus' (EBTIC’s selected papers) (TALE)
Rangimarie 2

Chair: Dr Jason Ng

1. The Usability Research of Learning Resource Design for MOOCs
   Xiao, J., Xu, Z., Jiang, B., Wang, M.

2. An Exploration of Intelligent Learning Systems
   Wang, M., Hauze, S., Olmstead, W., Breshna, A., Zaineb, B., Ng, J.

3. iARBook: An Immersive Augmented Reality System for Education
   Bazzaza, M.W., Al Delail, B., Zemerly, J., Ng, J.

4. Does Gender Matter for Collaborative Learning?
   Cen, L.

5. Investigation of the Utilisation of Social Networks in E-learning at Universities
   Wang, F., Azam, S., Ng, J.

Session 8A – Student Engagement & Retention (Software Engineering)
Sounding Theatre

Chair: Dr Patricia Kelly

1. Teaching Mathematical Reasoning: From Textbooks to Software
   Brankovic, L., Muir, A., Giggins, H.

2. Exploring the effect of different usages of technology on the students’ using behaviour
   Huang, Y., Liu, C., Wang, C., Huang, T., Huang, Y.

3. "It runs slow and crashes often": Exploring engineering students' software literacy of CAD software
   Khoo, E., Hight, C., Torrens, R., Duke, M.

4. An e-Assessment method based on the Constructive Progressive Alignment Pedagogy
   Lai, R., Sanusi, N.

5. A Proposed Definition of the Engineering Methodology
   Cavenett, S.

6. A Remote Laboratory for learning embedded systems & control
   Weddell, S.J., Bones, P.J., Wareing, N.M.
### Session 8B – Work in Progress

**Chair:** Ms Jo Devine

1. Teaching strategies in a level 2, large class design course  
   *Blazewicz, A.*, *Missingham, D.*, *Kestell, C.*
2. Baby steps towards flipped learning  
   *Dahm, K.*
3. Reflection of a female engineering student role-model on engaging school students in the Qld Western-Downs  
   *Goh, S.*, *Adams, E.*
4. Viva voce for Student Assessment and Learning  
   *Parameswaran, N.*, *Gorithi, R.*, *Tiwari, A.*
5. Supporting Implementation of Concept-Based Pedagogy by Learning about Faculty use of the AIChE Education Division Concept Warehouse  
   *Gilbuena, D.M.*, *Brooks, B.J.*, *Koretzky, M.*, *Silverstein, D.L.*
6. Using automated text analysis to evaluate students  
   *Goncher, A.*, *Boles, W.*, *Jayalath, D.*

### Session 8C – Work in Progress

**Chair:** Dr Prue Howard

1. Meeting the Communication Skill Needs of Employers with Professional Portfolios  
   *Milke, M.*, *Comer, K.*, *Koorey, G.*, *Carpenter, L.*
2. Reflections on a collaborative Degree: the Metro experience  
3. Disaster Week: A case study immersing first year engineering students in a disaster context to measure communication skills  
   *Bigham, A.*, *Harris, T.*
4. The role-playing game: engineering students meeting real world wicked problems  
   *Sano, M.*, *Lemckert, C.*
5. Alternative Approaches to Skill and Assessment Development in a Cooperative Education Program  
   *Harte, D.*, *Symes, M.*
6. Enhancing the role of women in engineering  
   *Thorpe, D.*, *Delaney, B.*
Session 8D – Work in Progress on Student Engagement & Retention
Oceania South
Chair: Professor Douglas Hargreaves

1. Technical Support Role for Project Oriented Design Based Learning in Engineering
   Arisoy, H., Chandrasekaran, S., Stojcevski, A.
2. Implementing a project-based first year engineering systems design subject
   Buskes, G.
3. Supporting Student Engagement with Capstone Project Presentations
   Kist, A.A.
4. Fostering Ownership of Learning in Engineering Education
   Quental, D., Reidsema, C., Kavanagh, L.
5. Effecting Teamwork Outcomes in Online Courses
   Wandel, A.P., Jolly, H.
6. The systematic influences on student evaluation of teaching in engineering education
   Palmer, S.

Session 8E – Computer-Based Learning and Courseware Technologies 1 (TALE)
Angus Room
Chair: Dr Andrew Nafalski

1. Cloud-Based Content Cooperation System to Assist Collaborative Learning Environment
   Lim, G.
2. Sensor Data Acquisition, Processing and Presentation in First Year Engineering Programmes
   Gadzhanov, S., Nafalski, A., Nedic, Z.
3. A Simulation Study to the Dually Adaptive Online IRT Testing System
   Hirose, H., Tokusada, Y.
4. Modelica Modeling Language as a Tool on Control Engineering Education: Simulation of a Two-Tank System
   Figueiredo, J., Machado, J.M., Carvalho, V.H., Soares, F.O.
Wednesday 10 December 2014

Session 8F – Curriculum Design and Pedagogy – 1 (TALE)
Rangimarie 1
Chair: Dr Mani Nallasamy

1. Mapping Analysis of CS2013 by Supervised LDA and Isomap
   Sekiya, T., Matsuda, Y., Yamaguchi, K.
2. Full STEAM Ahead: A Manifesto for Integrating Arts Pedagogics into
   STEM Education
   Connor, A.M., Karmokar, S., Whittington, C., Walker, C.
3. Some Considerations on Improving the Education Quality of Graduate
   Students
   Tong, M., Zhang, J., Zhang, J.
4. A Study on Threshold Concepts in Teaching and Learning in TAFE-
   Industry Training
   Nallasamy, M.

Session 8G – Engaging, Evaluating and Motivating Learners – 2 (TALE)
Rangimarie 2
Chair: Dr Sascha Nikolic

1. Building Technology Creativity Inspiration Model in mechanical
   engineering field
   Huang, W.-C., Yuan, Y.-H., Wu, M.-H.
2. Introducing Embedded Systems Development on a Robotics-Based
   Platform
   Suppiah, R., Abbas, F.
3. On-Campus “Hands-on” Research Opportunities for International
   Exchange Undergraduate Students
   Miyahara, K., Tanaka, T.
4. Science and Technology Learning Model Development to Encourage
   Thai High School Student to Learning in Engineering Career
   Koomtong, N., Chomsuwan, K., Tanprasert, K., Pinit, P.
Wednesday 10 December 2014

Session 9A – Student Engagement & Retention (Mechanical Engineering)
Sounding Theatre

Chair: Dr Llew Mann

1. Using Learning Analytics to Evaluate the Effectiveness of the Flipped Classroom Approach
   Lucke, T.
2. Enhancing student learning outcomes in manufacturing engineering through design based learning
   Polishetty, A., Chandrasekaran, S., Goldberg, M., Littlefair, G., Steinwedel, J., Stojcevski, A.
3. Developing Teamwork Competencies in a Design Course – Self-Perceptions of Students
   Smith, W.F., Siddique, Z., Mistree, F.
4. Improving student engagement through content and assessment choice in a common first year
   Hilditch, T., Chandrasekaran, S., Collins, P.
5. Using an International Survey to Inform Scenario of the Future of Engineering Education
   Ohland, M.W., Dicht, B., Froyd, J.E., Lindsay, E.D., Lord, S.M., Prahalla, K.
6. Employability of Engineers Relative to Other Graduates
   Smith, J.V., Jollands, M.

Session 9B - General
ICON
Chair: Mr John Findlay

1. Reflection: Can It Be Learned?
   Figueroa, E., Parker, L., Kadi, A.
2. Curriculum drift: A multi-dimensional perspective
   Johns-Boast, L.
3. Proximating Ethics: Perceptions of the engineering profession and implications for learning
   Pons, D.J.
4. Teaching load allocation in a teaching unit: optimizing equity and quality
   Qu, X., Wang, S., Easa, S., Liu, Z.
5. Turning Tedium to Terrific: An Authentic Learning Experience to Engage Engineering Students in Project Management
   Tuladhar, R., Pandey, G.R., Turner, P., Christie, D.
6. Complex Engineering Design: Project Based Learning Incorporating Sustainability and Other Constraints
   Sen Gupta, G., Bailey, D.G.
Session 9C - General
Oceania North
Chair: Dr Tom Qi

1. A Multi-Perspective Approach to Technical Presentation Assessment
   Bhave, P., Topkar, V., Bhonsle, M.
2. Longitudinal study of the success rates of a cohort of New Zealand Diploma in Engineering (Civil) domestic students
   Chai, E., Leaver, J.
3. Variation of Reading Methods for Positive and Negative Logic AND Gates: Examining Eye Movement
   Ho, H., Huang, D.
4. Beyond ‘Globally Competent’: Preparing Engineers for ‘Wicked Competencies’ and ‘Superdiversity’
   Kelly, P., Collett, D.
5. Global engineering 101: an first year international ambassadorship program
   Lucas, H., Bakopoulos, P., Grano, H., Willis, C., Wright, M., Missingham, D., Kestell, C.
6. Student Perceptions of Engineering Design Across the Curriculum at a Large Australian University
   Sevilla, K., Meyer, J., Perez-Compton, C.

Session 9D – Student Engagement & Retention
Oceania South
Chair: Dr Sally Male

1. An analysis of the application of intelligent tutoring systems on students’ self-regulated learning development
   Wang, C., Rowe, G.B., Giacaman, N., Gunn, C.
2. How do university engineering graduates influence high school students through mentoring programs?
   Gow, I., Wandel, A.P.
3. Video Presentations in Engineering-Physics Practicals to Increase the Efficiency of Teaching and Learning
4. “Don’t know what we’ll be doing yet”: Enhancing career preview and engagement among undergraduate engineering students
   Male, S.A., Bennett, D.
5. Students and industry perspective of group work in a first year engineering curriculum at Queensland University of Technology
   Senadj, B., James, J., Hargreaves, D.
6. Empowering Undergraduate Educations through Support of Student Societies
   Thompson, F., Wilson, S., Waterhouse, A., Armstrong, C., Keane, J., Forrest, A.L., Symes, M.
Wednesday 10 December 2014

Session 9E – Computer-Based Learning and Courseware Technologies (TALE)
Angus Room Chair: Craig Watterson

1. An Educational Tool Design for the Course of Signal Processing Based on MATLAB GUI
   Han, P., He, W., Shi, Q., Han, Y.
2. A System for the Sharing and Reuse of Learning Objects
   Huang, K.H., Tsai, S.R., Huang, Y.S., Wen, C.K., Huang, Y.C., Ho, S.P., Ssu, K.F.
3. Facilitating A Personalized Learning Environment Through Learning Analytics On Mobile Devices
   Tam, V.W.L., Huang, Y., Lam, E.Y.
4. Requirements Engineering Education using Expert System and Role-Play Training
   Nakamura, T., Kai, U., Tachikawa, Y.

Session 9F – Teaching Approaches – 2 (TALE)
Rangimarie 1 Chair: Professor Dale Carnegie

1. Logical Interpretation about Problem Types and Solution Strategies of the Butterfly Model for the Automation of Contradiction-based Problem Solving
   Hyun, J.S., Park, C.J.
2. Facilitating the creative performance of mechanical engineering students: The moderating effect of creative experience
   Shih, H.-C., Yuan, Y.-H., Lee, J.-C.
3. Design and implementation of a module in Smart Systems - How to train engineering students in collaboration
   Samuelsen, D.A.H., Graven, O.H., Bjerk, J.
4. QTiME – A new Paradigm for 21st Century Learning
   Ajjampur, B.
5. The Baroque Music’s Influence on Learning Efficiency Based on the Research of Eye Movement
   Gu, R., Zhang, J., Xu, C., Tong, M.

Session 9G – Engagement and learning for the Intelligent campus’ (EBTIC's Keynote and Roundtable) (TALE)
Rangimarie 2 Chair: Dr Jason Ng
Keynote and Roundtable Discussion on Engagement and learning for the Intelligent campus - Sponsored by EBTIC